must indicate the existence of such a medical variance on the CDLIS driver record and the CDL document, if issued, using the restriction code "V" to indicate there is information about a medical variance on the CDLIS driver record.

NOTE: In accordance with the agreement between Canada and the United States (see footnote to §391.41 of this chapter), drivers with a medical variance restriction code on their CDL are restricted from operating a CMV in the other country.

[76 FR 26887, May 9, 2011]

Subpart G—Required Knowledge and Skills

SOURCE: 53 FR 27654, July 21, 1988, unless otherwise noted.

§383.110 General requirement.

All drivers of CMVs must have the knowledge and skills necessary to operate a CMV safely as contained in this subpart. The specific types of items that a State must include in the knowledge and skills tests that it administers to CDL applicants are included in this subpart.

[76 FR 26888, May 9, 2011]

§383.111 Required knowledge.

- (a) All CMV operators must have knowledge of the following 20 general areas:
- (1) Safe operations regulations. Driverrelated elements of the regulations contained in parts 391, 392, 393, 395, 396, and 397 of this subchapter, such as:
- (i) Motor vehicle inspection, repair, and maintenance requirements;
- (ii) Procedures for safe vehicle operations:
- (iii) The effects of fatigue, poor vision, hearing impairment, and general health upon safe commercial motor vehicle operation:
- (iv) The types of motor vehicles and cargoes subject to the requirements contained in part 397 of this subchapter; and
- (v) The effects of alcohol and drug use upon safe commercial motor vehicle operations.
- (2) Safe vehicle control systems. The purpose and function of the controls

and instruments commonly found on ${\rm CMVs.}$

- (3) CMV safety control systems. (i) Proper use of the motor vehicle's safety system, including lights, horns, side and rear-view mirrors, proper mirror adjustments, fire extinguishers, symptoms of improper operation revealed through instruments, motor vehicle operation characteristics, and diagnosing malfunctions.
- (ii) CMV drivers must have knowledge of the correct procedures needed to use these safety systems in an emergency situation, e.g., skids and loss of brakes.
- (4) Basic control. The proper procedures for performing various basic maneuvers, including:
- (i) Starting, warming up, and shutting down the engine;
- (ii) Putting the vehicle in motion and stopping;
- (iii) Backing in a straight line; and
- (iv) Turning the vehicle, e.g., basic rules, off tracking, right/left turns and right curves.
- (5) *Shifting*. The basic shifting rules and terms for common transmissions, including:
- (i) Key elements of shifting, e.g., controls, when to shift, and double clutching.
- (ii) Shift patterns and procedures; and
- (iii) Consequences of improper shifting.
- (6) Backing. The procedures and rules for various backing maneuvers, including:
- (i) Backing principles and rules; and
- (ii) Basic backing maneuvers, e.g., straight-line backing, and backing on a curved path.
- (7) *Visual search*. The importance of proper visual search, and proper visual search methods, including:
 - (i) Seeing ahead and to the sides;
 - (ii) Use of mirrors; and
 - (iii) Seeing to the rear.
- (8) Communication. The principles and procedures for proper communications and the hazards of failure to signal properly, including:
- (i) Signaling intent, e.g., signaling when changing direction in traffic;
- (ii) Communicating presence, e.g., using horn or lights to signal presence; and